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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|--|-------------|----------------------|----------------------------|------------------------|
| 10/511,304   | 10/15/2004  | Takao Koyama         | 009682-138                 | 9491                   |
| 7590   | 05/16/2007  |                      |                            |                        |
| Robert G Mukai<br>Burns Doane Swecker & Mathis<br>PO Box 1404<br>Alexandria, VA 22313-1404 |             |                      | EXAMINER<br>NGUYEN, TUAN N |                        |
|  |             |                      | ART UNIT<br>3751           | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>05/16/2007    | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/511,304             | KOYAMA, TAKAO       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Tuan N. Nguyen         | 3751                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 February 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 21-59 is/are pending in the application.
- 4a) Of the above claim(s) 22-36, 38-50, 52, 54, 56 and 58 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 21, 37, 51, 53, 55, 57 and 59 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/30/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments filed 2/6/07 have been fully considered but they are not persuasive. With respect to Quercioli reference, the barrel (3) is made of transparent material; therefore, the ink depletion can inherently be viewed any along the barrel body such as the portion the barrel as claimed. Since the barrel of reference applied below is transparent for viewing the ink therein, the depletion of the ink inside the barrel would be apparent. One of ordinary skill would know that the portion inside the barrel where the ink has been depleted would be lighter in color or would be clear depending on the property of the ink.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 21, 37 and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Quercioli.

Quercioli discloses a writing instrument in which an ink impregnated into an ink occlusion body (14) in a barrel (3) is fed to a pen tip (9a) in a writing part, wherein the ink impregnated into the ink occlusion body is fed to the pen tip via an ink guiding feed (9) having visibility since barrel (3) is made of transparent material, and a sign of

exhausting the ink fed from the ink occlusion body is inherently detected by visually observing the ink guiding feed described above via a visible part formed in the barrel.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 21, 37, 51, 53, 55, 57 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krita in view of Takanashi et al. (hereinafter Takanashi) and Madaus et al. (hereinafter Madaus).

In regard to claims 21, 37 and 59, Krita discloses a writing instrument (Fig. 1) in which an ink impregnated into an ink occlusion body (101) in a barrel (100) is fed to a pen tip (12) in a writing part, wherein the ink impregnated into the ink occlusion body is fed to the pen tip via an ink guiding feed (12a) having visibility since it is made of transparent material. Although the Krita reference is silent as to the material of the barrel being made out of transparent material, attention is directed to the Takanashi reference which discloses an analogous writing instrument, which further includes a barrel (12) and an ink guiding feed (18) made out of transparent material (see col. 8, lines 11-16) so as to check not only the residual ink quantity in the ink tank but also that in the collector (see col. 5, line 64 et seq.). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the barrel of Krita out of transparent material as, for example, taught by Takanashi in order to

check not only the residual ink quantity in the ink tank but also that in the ink guiding feed area. In so doing, a sign of exhausting the ink fed from the ink occlusion body is inherently detected by visually observing the ink guiding feed via a visible part formed in the barrel. In regard to claim 51, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make only a portion of the barrel visible as claimed in a way similar to the portion (10) in Fig. 4 of Madaus. In regard to claims 53, 55 and 57, although the Krita reference is silent of the specific dimension of the ink guiding feed having an ink passage, the specific surface tension of the ink, and the specific viscosity of the ink as claimed, it would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain an ink guiding feed having an ink passage cross-sectional area in the specific range as claimed and an ink having the specific surface tension and viscosity as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

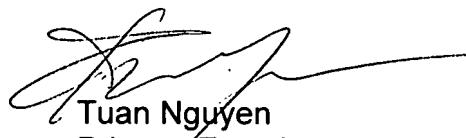
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N. Nguyen whose telephone number is 571-272-4892. The examiner can normally be reached on Monday-Friday (10:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tuan Nguyen  
Primary Examiner  
Art Unit 3751

TN